INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/41004

A. CLASSIFICATION OF SUBJECT MATTER					
IPC(8) : AOIN 43/04					
US CL : 514/23					
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum de de la constantina del constantina de la constantina de la constantina de la constantina del constantina de la constantina del					
Minimum documentation searched (classification system followed by classification symbols)					
U.S. : 514/23					
Documentation coarshed other than m	Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Documentation searched other man in	minum documentation to the	extent mat such docum	iens are meruded i	ii the fields searched	
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)					
STN and East for structure					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
		propriate, of the relev	ant passages	Relevant to claim No.	
A US 6,183,738 (Clark)	US 6,183,738 (Clark) 6 February 2001 (06.02.2001), see entire document and claims 1-22				
110 4 414 147 (VIII	US 4,414,147 (Klibanov et al) 9 November 1983 (08.1 1.2003) see entire document.				
A US 4,414,147 (Klibano	ov et al) 9 November 1983 (08.	1 1.2003) see entire do	cument.	1-28	
}					
				•	
	•				
				i	
	•				
				1	
				Ì	
				l	
Further documents are listed in	the continuation of Box C				
	aic continuation of box c.	See natent	family anney		
Special categories of cited docum			family annex.		
"A" document defining the general state of the	nents:	"T' later docume	ent published after the int	ernational filing date or priority	
		"T later docume date and not	ent published after the int in conflict with the appli	cation but cited to understand the	
particular relevance	nents: e art which is not considered to be of	"T later docume date and not principle or	ent published after the int in conflict with the appli theory underlying the inv	cation but cited to understand the cention	
particular relevance	e art which is not considered to be of	"T later docume date and not principle or "X" document of	ent published after the int in conflict with the appli theory underlying the inv f particular relevance; the	cation but cited to understand the cention cannot be	
	e art which is not considered to be of	"T" later docume date and not principle or "X" document of considered in	ent published after the int in conflict with the appli theory underlying the inv f particular relevance; the tovel or cannot be consider	cation but cited to understand the cention	
particular relevance "E" earlier application or patent published or	e art which is not considered to be of	"T" later docume date and not principle or "X" document of considered in	ent published after the int in conflict with the appli theory underlying the inv f particular relevance; the	cation but cited to understand the cention cannot be	
particular relevance "E" earlier application or patent published or	e art which is not considered to be of or after the international filing date riority claim(s) or which is cited to	"T later docume date and not principle or "X" document of considered rewhen the document of document o	ent published after the int in conflict with the applitheory underlying the inv f particular relevance; the lovel or cannot be conside cument is taken alone f particular relevance; the	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on pi	e art which is not considered to be of or after the international filing date riority claim(s) or which is cited to	"T later docume date and not principle or "X" document of considered in when the document of considered it conside	ent published after the int in conflict with the applitheory underlying the inv f particular relevance; the lovel or cannot be consider current is taken alone f particular relevance; the o involve an inventive ste	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be p when the document is	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified)	or after the international filing date riority claim(s) or which is cited to citation or other special reason (as	"T" later docume date and not principle or "X" document of considered rewhen the document of considered to considered to combined w	ent published after the int in conflict with the appli theory underlying the inv f particular relevance; the tovel or cannot be conside cument is taken alone f particular relevance; the o involve an inventive ste ith one or more other suc	claimed invention cannot be component is a document, such combination	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another	or after the international filing date riority claim(s) or which is cited to citation or other special reason (as	"T" later docume date and not principle or "X" document of considered in when the document of considered it combined when the document of the docu	ent published after the int in conflict with the applitheory underlying the inv f particular relevance; the lovel or cannot be consider current is taken alone f particular relevance; the o involve an inventive ste	claimed invention cannot be component is a document, such combination	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified) "O" document referring to an oral disclosure, "P" document published prior to the internation	or after the international filing date tority claim(s) or which is cited to citation or other special reason (as use, exhibition or other means	"T later docume date and not principle or "X" document of considered in when the document of considered in considered to considered to considered when the document of considered with the document of the doc	ent published after the int in conflict with the appli theory underlying the inv f particular relevance; the tovel or cannot be conside cument is taken alone f particular relevance; the o involve an inventive ste ith one or more other suc	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be exp when the document is h documents, such combination the art	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified) "O" document referring to an oral disclosure,	or after the international filing date tority claim(s) or which is cited to citation or other special reason (as use, exhibition or other means	"T' later docume date and not principle or "X" document of considered rewhen the document of considered to considered to considered to considered to considered to combined we being obvious "&" document on document or docum	ent published after the int in conflict with the appli theory underlying the inv f particular relevance; the tovel or cannot be conside cument is taken alone f particular relevance; the o involve an inventive ste ith one or more other suc as to a person skilled in the ember of the same patent	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be exp when the document is h documents, such combination he art	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified) "O" document referring to an oral disclosure, "P" document published prior to the international disclosure,	or after the international filing date riority claim(s) or which is cited to citation or other special reason (as use, exhibition or other means onal filing date but later than the	"T later docume date and not principle or "X" document of considered in when the document of considered in considered to considered to considered when the document of considered with the document of the doc	ent published after the int in conflict with the appli theory underlying the inv f particular relevance; the tovel or cannot be conside cument is taken alone f particular relevance; the o involve an inventive ste ith one or more other suc as to a person skilled in the ember of the same patent	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be exp when the document is h documents, such combination he art	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified) "O" document referring to an oral disclosure, "P" document published prior to the international priority date claimed Date of the actual completion of the in	or after the international filing date riority claim(s) or which is cited to citation or other special reason (as use, exhibition or other means onal filing date but later than the	"T later docume date and not principle or "X" document of considered when the do considered to combined when the document of the document making of the document makin	ent published after the int in conflict with the applitheory underlying the inv f particular relevance; the tovel or cannot be considered current is taken alone f particular relevance; the o involve an inventive ste ith one or more other such as to a person skilled in the ember of the same patent	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be exp when the document is h documents, such combination he art	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified) "O" document referring to an oral disclosure, "P" document published prior to the international priority date claimed Date of the actual completion of the in 16 December 2005 (16.12.2005)	or after the international filing date riority claim(s) or which is cited to citation or other special reason (as use, exhibition or other means onal filing date but later than the international search	"T later documer date and not principle or "X" document of considered to considered to considered to considered to considered to considered to considered where the document of the considered to cons	ent published after the int in conflict with the applitheory underlying the inv f particular relevance; the tovel or cannot be considered current is taken alone f particular relevance; the o involve an inventive ste ith one or more other such as to a person skilled in the ember of the same patent	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be exp when the document is h documents, such combination he art	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified) "O" document referring to an oral disclosure, "P" document published prior to the internationate of the actual completion of the in 16 December 2005 (16.12.2005) Name and mailing address of the ISA.	or after the international filing date riority claim(s) or which is cited to citation or other special reason (as use, exhibition or other means onal filing date but later than the international search	"T later docume date and not principle or "X" document of considered when the do considered to combined when the document of the document making of the document makin	ent published after the int in conflict with the applitheory underlying the inv f particular relevance; the tovel or cannot be considered current is taken alone f particular relevance; the o involve an inventive ste ith one or more other such as to a person skilled in the ember of the same patent	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be exp when the document is h documents, such combination he art	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified) "O" document referring to an oral disclosure, "P" document published prior to the internation priority date claimed Date of the actual completion of the in 16 December 2005 (16.12.2005) Name and mailing address of the ISA. Mail Stop PCT, Attn: ISA/US	or after the international filing date riority claim(s) or which is cited to citation or other special reason (as use, exhibition or other means onal filing date but later than the international search	"T later docume date and not principle or "X" document of considered rewhen the document of considered to combined we being obvious "&" document much being obvious "&" document much being obvious "&" document much being of the board of mailing of the board authorized officer "Authorized officer"	ent published after the int in conflict with the applitheory underlying the inv f particular relevance; the tovel or cannot be considered current is taken alone f particular relevance; the o involve an inventive ste ith one or more other such as to a person skilled in the ember of the same patent	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be exp when the document is h documents, such combination he art	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified) "O" document referring to an oral disclosure, "P" document published prior to the internation priority date claimed Date of the actual completion of the internation of t	or after the international filing date riority claim(s) or which is cited to citation or other special reason (as use, exhibition or other means onal filing date but later than the international search	"T later documer date and not principle or "X" document of considered to considered to considered to considered to considered to considered to considered where the document of the considered to cons	ent published after the int in conflict with the applitheory underlying the inv f particular relevance; the tovel or cannot be considered current is taken alone f particular relevance; the o involve an inventive ste ith one or more other such as to a person skilled in the ember of the same patent	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be exp when the document is h documents, such combination he art	
particular relevance "E" earlier application or patent published or "L" document which may throw doubts on prestablish the publication date of another specified) "O" document referring to an oral disclosure, "P" document published prior to the internation priority date claimed Date of the actual completion of the in 16 December 2005 (16.12.2005) Name and mailing address of the ISA. Mail Stop PCT, Attn: ISA/US	the art which is not considered to be of a or after the international filing date or after the international filing date or after the international filing date or other special reason (as use, exhibition or other means onal filing date but later than the international search	"T later docume date and not principle or "X" document of considered rewhen the document of considered to combined we being obvious "&" document much being obvious "&" document much being obvious "&" document much being of the board of mailing of the board authorized officer "Authorized officer"	ent published after the int in conflict with the applit theory underlying the inv f particular relevance; the towel or cannot be considucument is taken alone f particular relevance; the oinvolve an inventive steith one or more other such as to a person skilled in the ember of the same patent the international sear \$\frac{1}{2006}\$	cation but cited to understand the ention claimed invention cannot be ered to involve an inventive step claimed invention cannot be exp when the document is h documents, such combination he art	

Form PCT/ISA/210 (second sheet) (April 2005)